

TRANDos™ is an invaluable tool for accelerator beam quality assurance (QA). It can be used for measuring and setting the dose/monitor unit (cGy/MU), calibration of the accelerator, and for profiling the photon and electron beam flatness and symmetry. In addition, the small detector size (2mm) and close pitch between the detectors (<2mm) makes TRANDos™ highly suitable for verification of Intensity Modulated Raidation Therapy (IMRT) delivery systems.

Ease of Use

The dimensions of TRANDosTM cover a field size of approximately 30×30 cm². The detector array can be positioned reproducibly at any gantry and collimator angle using a rigid mounting jig attached to the accelerator collimator. All the detector signals are integrated using corresponding electrometers, and are then multiplexed, digitized and stored onto a computer.

Software

A data collection and analysis software that works seamlessly with the hardware is included with the system. Information such as beam flatness, symmetry, dose in absolute value and percentage difference from the centre detector can be displayed in real-time. 3-D plots and 2-D contour plots can be generated for an in-depth visual inspection of the beam profiles. Horizontal, vertical, diagonal cross sections of the beam field can be plotted for comparison and verification purposes.

